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Assessment of Kenya's preparedness to disasters caused by natural hazards:

Floods, drought and disease outbreak

Report

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Acronyms

ACTED	Agency for Technical Cooperation and Development
ARC	Africa Risk Capacity
ASALs	Arid and semi-arid lands
CERF	Central Emergency Response Fund
CMDRR	Community managed disaster risk reduction
DFID	Department for International Development
DRM	Disaster Risk Management
DRR	Disaster risk reduction
EU	European Union
FEWS NET	Famine and Early Warning Systems Network
INGO	International non-governmental organisation
KES	Kenyan shilling
KHPT	Kenya Humanitarian Partnership Team
MP	Member of Parliament
NADIMA	National Disaster Risk Management Authority
NDMA	National Drought Management Authority
NDMU	National Disaster Management Unit
NDOC	National Disaster Operations Centre
NGO	Non-governmental organisation
ODA	Official development assistance
SOPs	Standard operating procedures
UN	United Nations
UNICEF	United Nations Children's Fund
UNISDR	UN Office for Disaster Risk Reduction
UNOCHA	UN Office for the Coordination of Humanitarian Affairs
US	United States
WARMA	Water Resource Management Authority

In March 2016, Development Initiatives was commissioned by the UK's Department for International Development (DFID) to conduct a political economy study on Kenya's preparedness for three natural disasters: droughts, floods and disease outbreaks.

The aims of this study are to: 1) provide evidence on DFID's preparedness in the wider context of El Niño preparedness; 2) compare this with the wider system of preparedness to flood, drought and disease outbreaks in Kenya; and (3) make a political economy analysis of decision-making on emergency preparedness in this context.

This report is the second output for the project and provides evidence on Kenya's preparedness for natural disasters. The first output was an internal assessment of DFID Kenya's response to the 2015 El Niño event.

This research has been funded by UK aid from the UK government. However, the views expressed do not necessarily reflect the UK government's official policies.

Executive summary

This report details the findings of our study on Kenya's preparedness for floods, drought and disease outbreaks – human and animal. It looks at preparedness at the national and subnational level focusing on Mandera and Migori counties. We assess preparedness under different frameworks: governance and legal; preparedness capacity; linkages to international processes of disaster preparedness; and financial allocations to preparedness. We also present case studies on disaster preparedness at the county level. Mandera County is classified as arid and semi-arid and is prone to droughts. Migori is prone to floods.

Findings

Currently, there are no policies in place on disaster preparedness – at either the national level or in the majority of counties. Various factors have led to the slow enactment of such laws:

1. Lack of political will
2. Weak coordination and engagement of stakeholders
3. Competing priorities at the National Assembly
4. Lack of a champion in the Executive

We recommend a multi-stakeholder approach in defining policies that guide disaster preparedness to ensure that roles are defined and to promote accountability. This should involve representatives from human and animal health, government, non-governmental organisations, UN agencies and other donors, academia, beneficiaries, media and other development practitioners in the disaster preparedness sector.

With the lack of guiding policies, coordination of preparedness across the different disasters is not strong. There are multiple coordination platforms across the various actors, which are perceived as useful but rely on good relationships to work.

Drought preparedness appears much better coordinated than flood and disease preparedness. It seems sensible for the country to consider replicating the well-regarded National Drought Management Authority (NDMA) approach for the different types of common disasters. The agencies responsible for different types of disasters should then feed into a higher-level coordinating body that brings together all the disasters and coordinates response too. Each of these NDMA-like agencies would have up-to-date standard operating procedures, adopt a multi-stakeholder approach, and establish systems at the national and subnational level. This will help to avoid the risk of duplication of responsibilities.

We found different examples of community preparedness largely informed by subnational context in Mandera and Migori. We recommend that such initiatives be encouraged and their impact documented.

Despite the lack of a law, we found linkages between Kenya's preparedness and international processes. Kenya has participated in both the Hyogo Framework for Action (2005-2015) and Sendai Framework for Disaster Risk Reduction (2015-2030), and was among the first countries to sign up to the Africa Risk Capacity (ARC) – and makes the highest premium contribution in Africa. Many of our respondents were aware of the Hyogo and Sendai Frameworks; few were aware of the ARC.

We found resource allocations to preparedness are increasing, particularly at the international level. However, we did not assess how the mix of other instruments for preparedness works and how they interact.

At the subnational level, we found that the preparedness process is less coordinated particularly in counties with no NDMA presence (24 counties including Migori). Disaster preparedness and response has become a shared role between national and subnational government and this is perceived to have resulted in limited coordination. County government officials, especially in non-arid and semi-arid counties, should benefit from knowledge strengthening on: disaster and resilience measurement, climate change dynamics, modelling, disaster response triggers, and thresholds. It also needs to be recognised that resource allocation by county government is strongly influenced by the local political economy, resulting for instance in expenditure on El Niño event preparation and response in Mandera County being far less than budgeted, with the money released late and issues over devolving funds to subnational level. In summary, in the evolving relationship between the county and national government, resources allocation for disasters has become problematic.

Kenya's capacity to prepare for disasters is not a data or information challenge. There are several sources of data, which could be joined up to improve decision-making and service delivery. Kenya is also ahead of the other East African countries in regards to technology, data and information, and systems. What the study found to be lacking is the culture of preparedness, especially across the different natural disasters.

Introduction

This report details the findings of our study on Kenya's preparedness for floods, drought and disease outbreaks – human and animal. It looks at preparedness at the national and subnational level focusing on Mandera and Migori counties. This study began in March 2016 and forms part of a study that assesses the UK Department for International Development (DFID)'s response to the El Niño event in 2015 in Kenya and ties in with an analysis of the political economy of decision-making on emergency preparedness in the country.

Through key informant interviews and focus group discussions, we spoke to 111 respondents at the national (46) and subnational levels (65). They ranged from Members of Parliament (MPs), Members of the County Assembly, national and county government employees, donors, United Nations (UN) agencies, international non-governmental organisations (INGOs), local non-governmental and community-based organisations, academia, research institutions, media, community leaders and members of the community including women groups.

This report responds to key questions:

1. What is the state of Kenya's preparedness for drought, floods and disease outbreaks?
2. What influences decision-making on emergency preparedness in Kenya?

We responded to these key questions by:

1. Mapping out key stakeholders and organisations involved in disaster preparedness and explaining how these stakeholders interact
2. Assessing Kenya's preparedness on knowledge and capacity dimensions
3. Drawing out reflections on the links between national-level systems and processes and existing international processes on disaster risk management and disaster risk reduction, in particular the Sendai Framework for Disaster Risk Reduction and African Risk Capacity (ARC)
4. Identifying overall lessons on the preparedness of the national coordination mechanisms for humanitarian response to natural disasters (floods, drought and disease outbreaks)
5. Making recommendations to improve Kenya's preparedness for these types of disasters

People's perceptions on the level of national preparedness and the responses to the question 'If there was one improvement the Government of Kenya should make in disaster response, what would it be?' are incorporated into the study findings and

recommendations. Key informants' quotes are shown as displayed quotations, we only attribute the type of institutions they represent e.g. government, legislature or international NGO unless where we sought permissions. A more detailed methodology and study limitations are given at the end of this report.

We present this report in an introduction and four main sections. Section 1 outlines the construct of disaster preparedness for a country like Kenya. We conceptualise disaster preparedness based on the UN Office for Disaster Risk Reduction (UNISDR) and UN Office for the Coordination of Humanitarian Affairs (UNOCHA) definition of disaster preparedness.¹ Section 2 presents the results of the study, divided into sub-sections on: governance and legal frameworks guiding disaster preparedness, and the actors involved. We present findings of Kenya's capacity to prepare and its linkages to international frameworks. Next, we analyse funding to disaster preparedness – through donor funding, domestic resource allocation and subnational spending. In Section 3, we present case studies of disaster preparedness at the county level in Mandera and Migori counties. Finally, Section 4 highlights the conclusions and recommendations from this study.

A brief profile of disaster vulnerability in Kenya

Kenya is prone to disasters like conflicts, slow-onset natural disasters like droughts and famine, and rapid-onset disasters like floods, land/mudslides and disease outbreaks. The arid and semi-arid lands (ASALs) covering about 89% of the total land mass and home to about 36% of the population² are regularly affected by droughts resulting in food insecurity, high levels of malnutrition-related illnesses and deaths, and disruption of livelihoods. The Western low lands around Lake Victoria, the coastal low lands around the Indian Ocean and other areas with poor surface water drainage are prone to flooding resulting in loss of life and property, as well as outbreak of waterborne human and animal diseases like cholera and Rift Valley fever.

The subnational level

Migori County

Migori County lies in the south-western part of Kenya; it borders Homa Bay to the north, Kisii to the north-east, Narok to the east and south-east, Tanzania to the south and south-west and Lake Victoria to the west. Almost half (48.4%) of the 900,000 population live below the national poverty line.³ The county ranks fourth on exposure to floods. It is prone to cholera outbreaks⁴ (1,528 reported cases in 2015⁵) and inter-clan clashes between the neighbouring communities. The County Government has a Department of Environment, Natural Resource and Disaster Management. But the activities of this department are often constrained by its limited budgetary allocation and the lack of a legal framework to guide disaster management in the county.⁶

Mandera County

Mandera County is located in the north-eastern part of Kenya. It borders Ethiopia to the north, Somalia to the east, and Wajir County to the south and south-west. It has a population of 1.02 million, 85.8% of whom live below the national poverty line.⁷ Nomadic pastoralism is the main economic activity with the residents rearing camels, goats, sheep and cattle. The county is classified as ASAL with scanty and unpredictable rainfall patterns. The security situation is also volatile due to inter-clan conflicts, cross-border conflicts and attacks by terrorists from Somalia.

The risk profiles for Migori and Mandera Counties

Based on the Index for Risk Management (INFORM), Mandera county has a risk score of 7 (the third highest risk score in Kenya after Garissa and Turkana).⁸ Migori county is ranked 17 (index of 6.1) and with a higher exposure to natural disasters (often floods) compared with Mandera.

Figure 1: Risk profiles for Migori and Mandera counties



Source: INFORM subnational data 2015, data accessed in October.

Section 1

The construct of disaster preparedness in Kenya

The scope of preparedness for natural disasters: what ought to happen

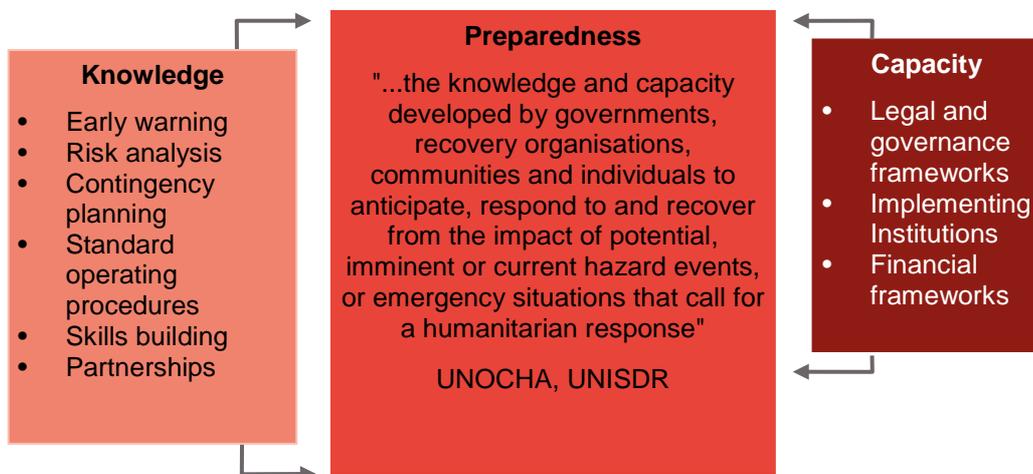
Our study adopted the UNISDR and UNOCHA definition of preparedness, as illustrated in Figure 2. The action of preparedness is carried out in the context of disaster risk management (DRM); it focuses on building capacities to manage emergencies in an efficient manner – but also on building systems for recovery to be sustainable and better. The term 'building back better for next time'⁹, included in the current Sendai Framework for Disaster Risk Reduction (2015-2030)¹⁰, aims to promote this sustained recovery.

Preparedness should be guided by and linked to proper analysis of risks, early warning, contingency planning, standard operating procedures (SOPs), skills building and partnerships. As indicated in the current and previous global frameworks on disaster, preparedness should also be backed by institutions and further strengthened by legal and financial frameworks. In practice, implementing these standards and procedures will often be driven by the political economy – the institutions and individuals that hold power, the incentives for different types of behaviour and the drivers that govern or influence decision-making.

There are various financial instruments for early preparedness such as insurance, domestic budget allocations, official development assistance (ODA) allocations in the form of loans and grants, forecast-based financing, crisis modifiers and the Central Emergency Response Fund (CERF). These all have different terms and conditions, eligibility rules, timeframes and procedures, so a mix is necessary for sustained preparedness and response. However, over and above that, investments need to be governed by a 'no-regrets' approach.

A 'no-regrets' approach refers to the proactive mobilisation of resources in response to identified long and short-term risks to prevent an impending disaster from occurring in the first place or from escalating once triggers have been identified.¹¹ The approach is thought to be cost-effective and based on the theory that investing on the basis of risks and a certain level of uncertainty will result in net positive effects in the long term, even if the anticipated risk does not transpire and costs are incurred in the short term. In practice, the approach is multi-sector and involves the delivery of a broad range of interconnected established programmes.

Figure 2: Construct of preparedness



Source: Development Initiatives informed by UNISDR and UNOCHA definitions

Section 2

Results

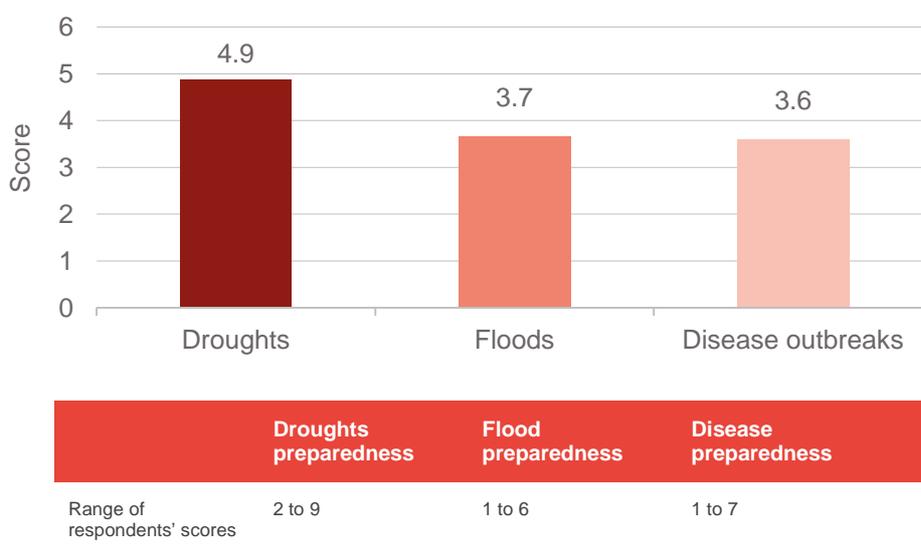
An assessment on preparedness – what happens in practice?

This section looks at the country's state of disaster preparedness across the governance, legal and financial frameworks. We include a section on the political economy of the way the various frameworks and actors interact and the incentives that drive behaviour. We begin by presenting perceptions of respondents to the country's preparedness.

Perceptions of respondents on preparedness to natural disasters

We asked respondents to score the state of Kenya's preparedness for drought, floods and disease outbreaks on a scale of 1 to 10: 1 being completely unprepared and 10 being completely prepared. Drought preparedness received the highest score (average of 4.9) compared with preparedness for floods (average score of 3.7). Respondents felt that the country is least prepared for disease (animal and human) outbreaks (average score of 3.6).

Figure 3: Respondents' perceptions of Kenya's preparedness



Source: Development Initiatives based on ranking by respondents

While this ranking is based on perceptions, it does give an indication of the state of preparedness for these natural disasters and aligns well with the findings from our study.

The governance and legal frameworks guiding disaster preparedness

'Ad hoc and knee jerk system (reactive) not proactive; on paper we look like we are doing something but in practice this is not true.' (INGO)

'We are averagely prepared. We don't have a body coordinating. We are fragmented, we need one disaster institution. We don't have a policy.' (UN Agency)

'Attempts to make preparation plans are conceptual and theoretical. But in practice this is not in place.' (National Government Ministry)

Disaster preparedness in Kenya is perceived to be fragmented, with the country often better at reactive rather than pro-active action. It has been difficult to get definitive answers on where agencies' mandates begin and end but it is clear that there are many different organisations and government agencies handling different elements of disaster preparedness and response. Each organisation has its own political and institutional interests and allegiances and these may be more powerful than the incentives for collaboration and partnerships. Respondents, particularly from government, mentioned that as a country, we seem to be well prepared, 'on-paper' but in practice this is not the case. It is perceived that coordination was better before devolution when disaster preparedness was managed at the national level and would trickle down to the district level through the district disaster committees (which do not currently exist at the county level).¹²

Following devolution, INGOs have now had to establish relationships in each of the counties they operate in, which is time consuming but quite useful in enabling close working relations with the county government.

'If there was one coordinating body to bring together all the 47 counties, INGO work would be faster in service delivery and response.' (INGO)

Agencies responsible for disaster preparedness in Kenya

We found eight main agencies in some way responsible for disaster preparedness in Kenya. These are in government or with close links to government and have the mandate

to play a key role in the country's disaster preparedness. Except for the Kenya Meteorological Department, these institutions are in charge of disaster preparedness, response and coordination. There are also disaster risk reduction (DRR) focal persons in various ministries. We introduce these institutions and present findings on respondents' perceptions of them.

Drought preparedness: National Drought Management Authority

Established in 2011 through the State Corporations Act following the 2011 drought, the National Drought Management Authority (NDMA) leads on drought preparedness and response in the ASALs. It is an authority under the Ministry of Devolution and Planning. Over time NDMA has progressed and received government, parliament and development partner support. This has been strengthened by the NDMA Act 2016, which gives the authority a stronger legal status. Among other things, the Act gives NDMA the responsibility for policy, coordination of drought response, putting in place systems of drought early warning and linking the country's drought management to international processes. The stability of NDMA is a welcomed approach, which could be replicated across other disaster types – with all the agencies speaking to one overarching institution in government.

In NDMA, there are two coordinating bodies at the national level bringing together various stakeholders in drought preparedness. These are the Kenya Food Security Meeting and the Kenya Food Security Steering Group. At the county level, this is organised under County Steering Groups.

Most respondents felt that NDMA has played a key role in drought management and preventing deaths from drought. There is a feeling that the country is better prepared for droughts given the role that NDMA plays both at the national and subnational level in ASAL counties. This matches well with the perceptions shown in Figure 3.

Flood preparedness: Water Resource Management Authority and Ministry of Water and Irrigation

Flood preparedness and management brings together the Water Resource Management Authority (WARMA) and the Ministry of Water. WARMA coordinates water resource management at the national and subnational level. For flood preparedness, it maps out flood prone areas; supports communities to develop flood management infrastructure and disseminate early warning information. The Ministry of Water is responsible for policy issues on water resources. Responsibilities for flood response are more diverse and link up with other agencies.

Our respondents in Migori County, which is more prone to floods, were more aware of the work of WARMA and especially in the 2015 El Niño where it created awareness about the floods. Over the years, WARMA has built infrastructure to monitor flooding and built the capacity of local communities. We interacted with some of the beneficiaries of this capacity support while in Migori.

Disease preparedness: Ministry of Health (human diseases)

The Ministry of Health through the Division of Disease Surveillance and Epidemic Response Unit is responsible for providing leadership on preparedness for human disease outbreaks. The Division of Health Emergencies and Disaster Risk Management, on the other hand, is responsible for response. Health is now a devolved function and there are systems for disease surveillance and response at the county level. However, our respondents felt these need strengthening.

The Government of Kenya, through its 2017–2019 Medium Term Expenditure Framework for the health sector¹³ has committed to allocating more funding to preparedness and response but, more importantly, to provide guidelines for counties on disaster preparedness for disease outbreaks.

Coordination of human disease preparedness is a challenge in the country. It appears that organisations and institutions depend on good relationships for coordination to work. While good relationships are drivers of coordination, the common agenda of disease preparedness, led by government, should guide coordination and operations. This is essential to avoid multiple agencies carrying out responsibilities that ought to be carried out together. Given the limited coordination, non-governmental organisations (NGOs) have gone ahead and invested in building relationships, even at the subnational level.

'Médecins Sans Frontières have had to establish relationships with all the 47 counties, which is time consuming. National government should coordinate this and make the work of organisations like Médecins Sans Frontières easier. Governments, NGOs and other donors should all have emergency response plans, but at the moment no one brings together all these plans, it depends on good relationships that organisations may have.'

(Médecins Sans Frontières, Country Director, Kenya)

Disease preparedness: Ministry of Agriculture, Livestock and Fisheries (animal diseases)

Disease surveillance and management is led by the Directorate of Veterinary Services. With the new constitution, veterinary services are implemented at the county level; hence the national directorate is responsible for guiding the counties on disease surveillance and response. We understand that 11 SOPs have been developed by the Directorate to support the counties to respond to disease outbreaks – but we have not seen them nor know which specific counties they relate to.

Animal disease preparedness benefits from support from the Africa Union Interafrican Bureau for Animal Resources, the Food and Agriculture Organization of the UN and the

International Livestock Research Institute. The Directorate of Veterinary Services noted that animal health receives less attention than human health does – and also less budget allocation. The main challenges have been: operationalising its disaster preparedness plans; activating response funding, which often goes through the national procurement system leading to delays in disbursements; and linking animal disease to the wider disasters in the country.

National Disaster Operations Centre

As the name suggests, the National Disaster Operations Centre (NDOC) is responsible for coordinating all disaster response operations in the country – and was leading the country's El Niño flood response in 2015. It does this through partnering with other actors such as the police and the Kenya Red Cross. NDOC was established in 1997 following the El Niño floods and sits within the Ministry of Interior. Besides response, NDOC also plays a preparedness role by managing the country's disaster loss database. It has also led disaster drills for man-made disasters. Our respondents, however, felt that NDOC's capacity could be strengthened to better coordinate response. Continued relationship building with humanitarian actors to gain traction as the 'go-to' institution for disaster response in the country would be useful for NDOC.

National Disaster Management Unit¹⁴

The National Disaster Management Unit (NDMU) was established through a presidential directive in 2013 and sits within the Ministry of Interior. It is seen as the government unit responsible for disaster risk management in the country, but also carries out some response activities. Led by the National Police Service, its operations cut across both natural and man-made disasters. NDMU has established the country's emergency response plan and SOPs¹⁵ though our respondents – particularly those outside government – were not aware of these and have had little interaction with NDMU.

Standard operating procedures

SOPs aim at:

1. Providing a list of major executive actions involved in responding to disasters and necessary measures needed for preparedness, response and relief
2. Indicating various actions that should be taken and by which actors within their sphere of responsibilities – linking up with their contingency plans
3. Ensuring that all concerned actors and agencies know the precise actions required of them at each stage of the response and also to ensure that all actions are closely and continuously coordinated.

In 2009, NDOC, like other stakeholders, had established SOPs; it is not clear how the different sets of SOPs interact.¹⁶

Kenya Meteorological Department

The Kenya Meteorological Department plays a key role in disaster preparedness by providing early warning information. It is the government department that all government agencies rely on for weather information. Respondents provided mixed perceptions about the Kenya Meteorological Department. Government respondents expressed trust in the department and its accuracy of information. Respondents outside government felt that the department could provide more timely information in a more innovative manner for it to lead to faster decision-making and response. At the county level, the department has representatives who could better disseminate the weather information to guide disaster preparedness.

The Kenya Red Cross

The Kenya Red Cross is an auxiliary to the government's humanitarian services and works closely with government and other humanitarian actors. Recognised as a first responder to emergencies, it has gained traction as the go-to institution both at the national and subnational level. All our respondents felt that the Kenya Red Cross does well in response but also has a preparedness system in place.

Platforms supporting coordination of disaster preparedness

The Kenya Humanitarian Partnership Team (KHPT) is a platform that brings together the UN agencies, donor agencies, INGOs, private sector, local organisations, national and subnational government. The main role of the KHPT is to ensure strategic coordination and coherence of humanitarian action by the Government of Kenya, and national and international humanitarian actors towards better humanitarian preparedness and response.¹⁷ To promote government ownership, the Ministry of Interior chairs the KHPT and the UN resident coordinator is the co-chair. KHPT meets every quarter at a senior level and monthly at an operational level. NDMA, NDOC and UNOCHA form part of the secretariat (NDMU does not seem to be part of KHPT). While KHPT is not a formal arrangement, acting more out of the goodwill of the participants, respondents feel that it plays a useful role in influencing government and advocating for better preparedness and response. It is also well recognised by development partners and UN agencies as it provides direct access to government. While we did not measure the perceptions of government towards KHPT, there seems to be a similarity of roles between the KHPT and the Humanitarian Services Committee, which is mentioned in NDMU's SOPs.¹⁸ None of our respondents were aware of the existence or operations of the Committee.

With this fragmentation and lack of confidence in the current systems, humanitarian actors have established other working groups to better coordinate disaster preparedness. The Inter-Agency Working Group on Disaster Preparedness for East and Central Africa, (IAWG) brings together INGOs in the humanitarian sector in the country. It does not include government as a member and is seen as a system for INGOs to coordinate operations and share knowledge.

The legal framework guiding preparedness

Disaster management is a shared function between national and subnational government. Counties are expected to be first responders in case of a disaster in the county.¹⁹ Kenya does not have a law that guides its disaster preparedness/management operations. The process of putting a law in place dates back to 1999.²⁰ At the time of writing this report, the Disaster Risk Management Bill 2016 had been introduced in parliament through a private members' bill²¹ sponsored by Hon Tiya Galgalo, MP for Isiolo.²²

The bill, if passed, will provide for a more centralised and coherent system of disaster preparedness in the country. The current fragmentation of preparedness has resulted in duplication of efforts and a response that is not optimal. However, it appears that there is a lack of political will to achieve this. This is partly about the lack of culture of investing in preparedness and partly because the individual agencies would lose some of their identity if things were more centralised.

The contents of the current draft DRM Bill align with past drafts²³ and link with the Kenya Vision 2030 and international commitments such as the Sendai Framework.

Establishing the National Disaster Risk Management Authority and county disaster risk management committees

The draft Bill proposes to establish the National Disaster Risk Management Authority (NADIMA) as the body that will lead and coordinate the country's approach to disaster prevention, preparedness, mitigation, response and recovery. From our interviews – with an INGO and a government agency – it appears that NADIMA will bring together the NDMA, NDOC and the NDMU agencies. We are, however, not sure if stakeholders welcome this approach given the NDMA Act was only passed early 2016.

'We are not sure the ASAL MPs and stakeholders will let NDMA merge into NADIMA – they like that it is independent.' (Local NGO)

Dominant factors contributing to the delayed passing of the DRM law in Kenya

1. Lack of political will

At the legislative and executive level, there seems to be no urgency on the need to bring disaster management under one body. The various agencies leading disaster preparedness and response seem comfortable operating independently, with coordination better left to good relationships. The draft DRM Bill 2016 proposes to bring these agencies (NDMA, NDOC and NDMU) together. While non-state actors feel this is a welcome approach, it appears there is currently no political will in the legislature and executive arms of government.

'There is not enough loud voice on it. To pass it does not just require normal workshops, it needs more lobbying. Media engagement is also needed.' (Member of Parliament)

2. Weak coordination and engagement of stakeholders

Besides the limited political will, engagement of key stakeholders has also been weak. For example, our respondents in the health and agriculture sectors and the KHPT were not aware of the progress on the draft law, who is involved; and how they can be part of the process. INGOs and UN agencies were more aware, having been part of the process at different points, although some admitted losing track or giving up along the way.

3. Competing priorities at the National Assembly

There is also uncertainty if the current content of the draft law would lead to it being passed in the present parliament – there is likely to be political interference and lack of prioritisation especially as the country goes into an election year in 2017.

4. The lack of a champion in the Executive

Besides having a champion in Parliament, the DRM Bill also needs a champion at the Executive level in order to gain more traction with the policy implementers.

The delay in passing the law could also be an indicator of the wider characteristic of the humanitarian sector in the country. Coordination is limited during preparedness and response with stakeholders often left to operate independently. This might be changing, however, given the increasing donor funding to preparedness and more recently the coordinated El Niño response in 2015 among government, donors and INGOs.

Will the law be a panacea for disaster preparedness?

We posed this question to our respondents. Opinion was divided between government and non-government stakeholders. Respondents from government agreed that the law is the first step to promoting accountability and enabling resource allocation; this group of respondents appears to be less influential in government though.

'Sometimes the good people in government are not the powerful ones.' (Ministry Respondent, National Government)

Without a DRM law, budget allocation will be fragmented and insufficient. However, the law would not operate alone – it would require the respective actors to play their part.

'With no law, accountability for disaster response goes down.'
(Government Agency)

In the past, the lack of a law has also limited the country's access to external funding for disaster preparedness. We heard of two incidents when the country was unable to receive funding due to the lack of a law.²⁴ Respondents outside government reported that a number of countries operate without a DRM law. What is more important is addressing the underlying issues on ownership, responsibility and accountability for disaster preparedness.

Disaster preparedness at the subnational level and relationships with the national level

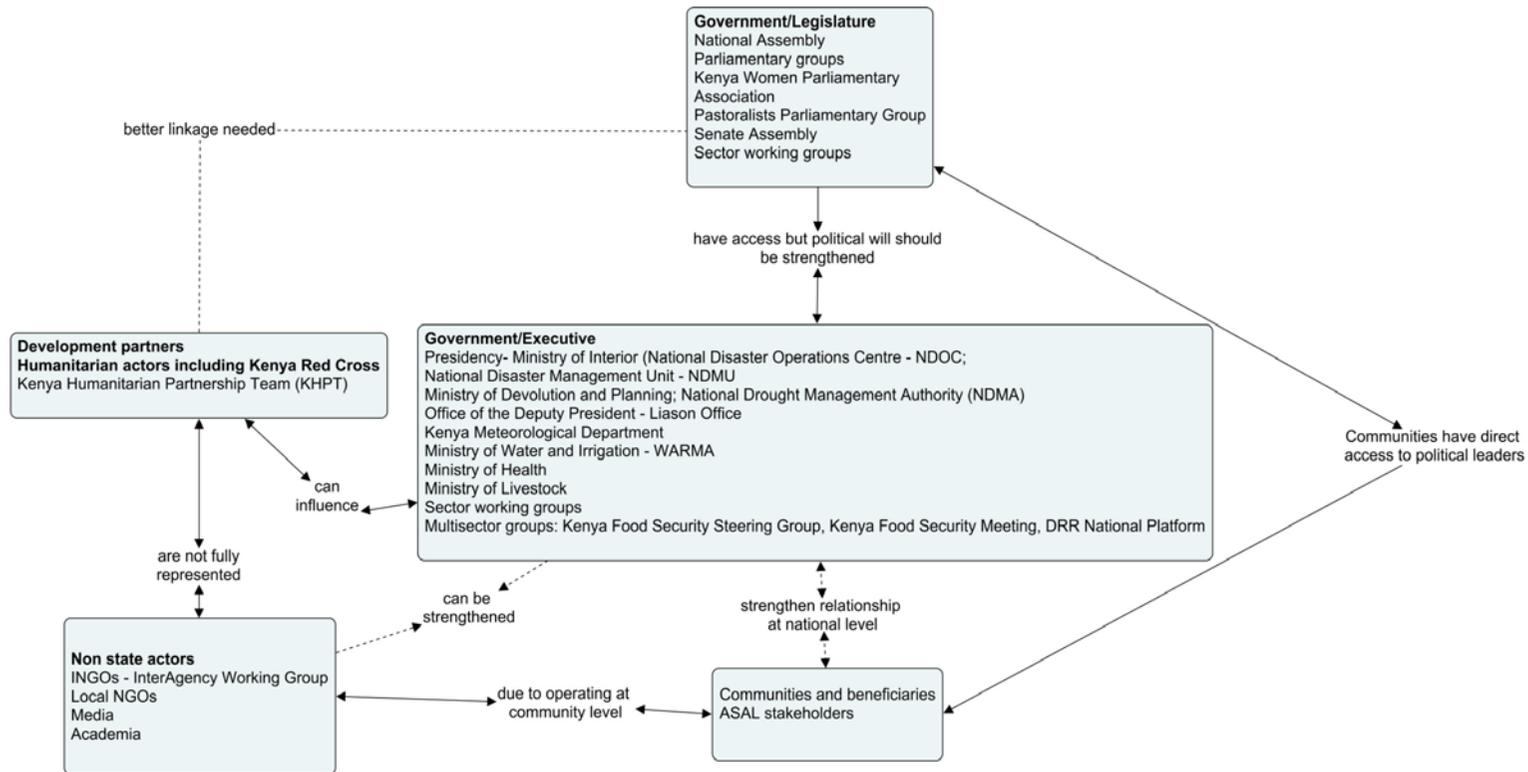
Currently, there are no standard and clearly defined DRM goals that all counties can commit to. This is in part due to the lack of a DRM law at the national level. Counties have taken the initiative to self organise, at times with limited knowledge of DRM or the ability to align their DRM plans to national or global processes. However, ASAL counties like Mandera have benefitted from NDMA's engagement and developed more systematic approaches to DRM, unlike non-ASAL counties such as Migori that do not have this national government guidance.

Across the counties, where DRM sits and how it is conceptualised varies. In Mandera, it is under the Ministry of Public Service, while in Migori it is under the Ministry of Environment, Department of Environment, Natural Resources and Disaster Management. This lack of harmonisation plays a role in affecting response and coordination across the country and counties. Interviews with respondents showed that out of the 47 counties, only four (Baringo, Kisii, Tana River and Nairobi) have a DRM law already passed by their respective county assemblies.²⁵

The Office of the Deputy President (through the Intergovernmental Relations Office) and the Council of Governors are by law required to play a role of providing linkages for national and subnational activities, which include disaster preparedness.²⁶ Our study, however, did not interrogate this to understand the nature of the relationship between national and subnational governments.

Figure 4 maps how the various institutions at the policy and operational level currently work at the national level. There are strong relationships between policymakers and their constituents. The relationship between policymakers and non-state actors needs more investment to turn to results. Non-state actors need to strengthen their relationships with the executive – though we find a stronger relationship in drought preparedness. Donors play a key role in influencing government (legislature and executive) – this can be harnessed to ensure that disaster preparedness across different types of disasters is better coordinated.

Figure 4: Key stakeholders in disaster preparedness in Kenya



Where  indicates relationships that should be strengthened;  indicates existing relationship.

Source: Development Initiatives

Kenya's preparedness capacity

Kenya's capacity to prepare for disaster is not a data or information challenge. There are several sources of data that could be joined up to improve decision-making and service delivery. Kenya is also ahead of the other East African countries in technology, data and information, and systems. The humanitarian actors in the country also reinforce the country's capacity. What we find lacking is the culture of preparedness especially across different natural disasters. The country is better prepared for drought than the other natural disasters.

Data and early warning information

Access to data on disasters, risks and weather information does not seem to be a key challenge in Kenya. Various systems are in place, such as the Famine and Early Warning Systems Network (FEWS NET), INFORM and meteorological information and services from Kenya Meteorological Department, to help address the existing data gaps.

The country's population data is more outdated, with the last national census carried out in 2009. The latest publicly available household budget survey data was collected in 2005. The timeliness of the survey data limits the value it can bring. National survey data is also not disaggregated by age, gender or disability – this affects the willingness to rely on this data to identify beneficiaries in initiatives such as the Hunger Safety Net Programme implemented by the NDMA. Joining-up timely data from the national surveys with what NGOs and other non-state actors collect would make data more interoperable and up-to-date for use.

Comparing the different natural disasters, the health sector is perceived to usually have more data collected at the health facility level. Through the Health Management Information System and the Department of Disease Surveillance, the country has sufficient information on patients, illnesses and health facilities. The extent to which this health data has been useful for disaster preparedness is beyond the scope of the present study.

'Kenya's health sector is characterised by very good statisticians who collect bio-data about patients but no one ever uses this data'. (INGO)

A culture of preparedness

Kenya has experienced two El Niño 'non-events' in recent years. Non-events mean disasters occurring but to a lesser magnitude than was predicted. This may have negatively affected people's willingness to prepare especially in locations that are less prone to disasters. Even in locations that are prone to disasters, for example the lowlands of Migori County, people are well aware of the effects of floods but often are not quick to prepare or respond to information. This is linked to cultural and economic factors, such as

not wanting to move out of homesteads where relatives have been buried or the inability to fully prepare for and recover from the effects of disasters once they occur.

The health sector is seen to have limited ability to respond to health emergencies particularly at the county level.²⁷

'Right now there is no capacity or response team at the counties, yet national government expects them to be first responders. Response capacity at the national level is also low.' (Ministry respondent, National Government)

Nationally, drought preparedness is seen to be relatively advanced given the country faces a high risk of drought. Government has put in place systems of preparedness such as the Hunger Safety Net Programme, Index Based Livestock Insurance and the ARC to cushion the effects of drought.

Awareness and the role of evidence

Most of our respondents did not link the lack of preparedness to a lack of information. Communities and decision-makers use a number of mediums to access information. The most useful sources of information for communities are community meetings, word of mouth, the police, phone conversations and local radios. This information is often based on trust and guides decision-making.

When asked where they go for evidence (processed information), respondents from government cited respective ministries. For evidence on floods, for example, they would go to the Ministry of Water and Irrigation or WARMA. Non-state respondents tend to rely on evidence from other humanitarian actors such as FEWS NET. These responses match with the findings of our previous study on Humanitarian Evidence Systems Mapping.²⁸

The role of beneficiaries

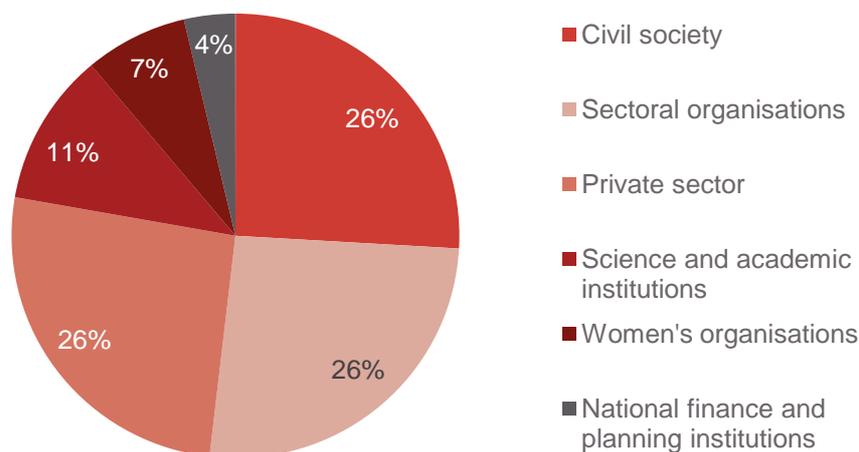
Respondents agree that communities are building preparedness mechanisms on the ground – they are informal, less scientific or documented. This means that government and decision-makers may not actually know the extent to which communities are prepared for disasters. (See Section 3 case studies for more details.)

Links to international frameworks and processes (Sendai Framework, ARC)

Though the country does not have a DRM legislation in place, it is well linked to international commitments and frameworks such as the Sendai Framework for DRR (2015–2030) and the ARC – but we find more of these linkages at the national level and fewer at the subnational level.

All our respondents at the national level were aware of the Sendai Framework, having taken part in some of the stakeholder consultations or having programmes that align to the priorities in the framework. Kenya has a DRR focal point person under the Ministry of Interior who also leads the coordination of the DRR platform (the platform is a key pillar of the Hyogo Framework of Action, priority 1, and is the in-country mechanism for the International Strategy for Disaster Reduction). The aim of the platform is to further strengthen national prioritisation of DRR by promoting and coordinating DRR awareness as well as to providing policy guidance. It is comprised of various national stakeholders including civil society, government and the private sector. Challenges will be to its sustainability due to limited funding for its activities and the lack of a legal framework to guide its operations.

Figure 5: Membership in the National DRR platform in Kenya (27 participating organisations)



Source: Development Initiatives based on Kenya's National report on the Hyogo Framework for Action (2013–2015)

The Africa Risk Capacity

The ARC, Africa's first sovereign catastrophe insurance pool, has been highlighted as a model initiative enabling early action in preparing for drought, building long-term resilience and contributing to sustainable development. Since its launch in May 2014, the ARC has continued to gain momentum; more governments are taking up policies and there is increased international recognition of the ARC. Payouts to ARC policy-holding governments are triggered when the estimated response costs cross a certain pre-defined threshold. The insured government uses the ARC payout to launch early response activities as set out in their pre-agreed operational plan.

Kenya was among the first African countries to join ARC in 2012. NDMA implements the ARC in Kenya and has a technical focal person, supported by a technical working group in the Kenya Food Security Steering Group. Since 2014, the country has paid an annual premium of approximately US\$9 million (around KES 800 million) – the highest premium paid by any country. It has not received any payouts though it made a claim in 2014.

While the ARC is a welcome idea, there ought to be better awareness creation of the facility. More than half of our respondents were not fully aware of ARC and how it operates. Kenya is also confident that if it puts in place proper preparedness systems – it may not need to pay high insurance premiums or take the cover at all.

Financial resources for disaster preparedness

'We don't put effort, and when we do, we spend the funds on disease treatment.'

(County Government Employee)

The cost-benefit case for investing in preparedness is convincing. The UN Development Programme (UNDP) reports that disaster preparedness saves US\$4–US\$7 for every US\$1 invested.²⁹ The World Bank and US Geological Survey showed that US\$40 billion invested in preparedness would have reduced disaster losses during the 1990s by US\$280 billion.³⁰ Despite this, investments are relatively modest.

No-regrets investments are an important investment practice in disaster preparedness. This guarantees that even where investments are made and the anticipated risks do not transpire, early action through disaster preparedness will result in a net positive effect in the long term – because costs are low or investment efforts build resilience.³¹ Such efforts would include prepositioning of stocks, market assessments, early engagement with markets to develop standing agreements and with donors to develop response plans, and establishing human resource systems.³²

In Kenya, we find examples of early no-regrets investments. In Mandera County there was pre-positioning, market assessments, and early warning systems. The ARC, the Index-Based Livestock Insurance and the Hunger Safety Net Programme are other examples of no-regrets investments. This scope of this study did not allow a cost-benefit analysis of these examples to measure their impact or the extent to which they enhance resilience.

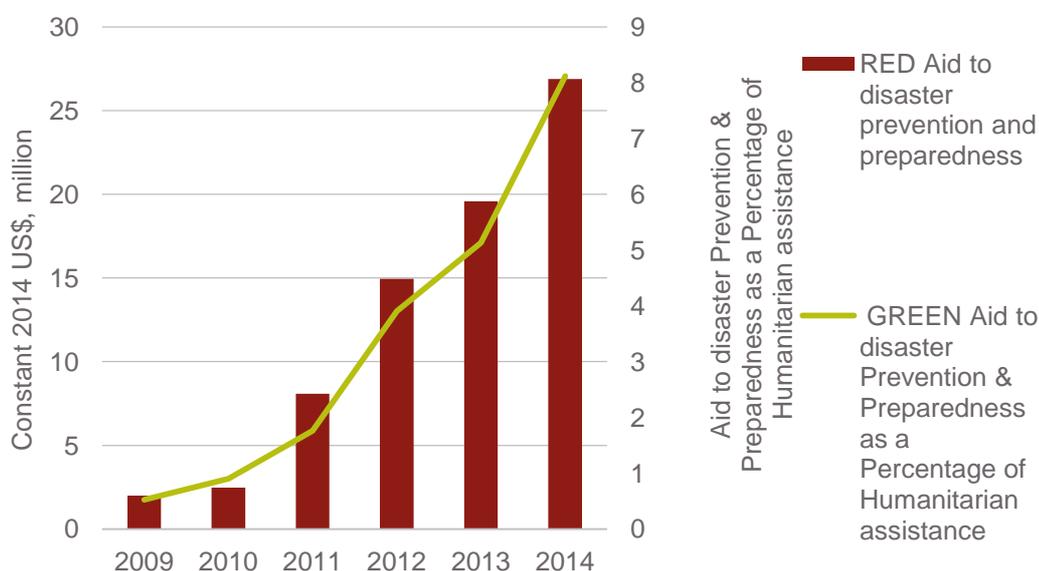
Investments in disaster preparedness to developing countries are made using various instruments. We focus on the allocations from international sources (official development assistance – ODA); from domestic resources through budget allocations; insurance allocations and contingency funding.

Donor funding for DRR in Kenya has increased steadily over the years to US\$27 million (KES 2.7 billion) in 2014. At the domestic level, tracing funding to disaster preparedness is through budget allocations to various ministries, state departments and other government agencies. These cut across the Ministries of Interior, Devolution and Planning, Health, Agriculture, Environment and Water. The government in its 2016/17 national budget estimates to spend about KES 20.5 billion (US\$205 million) on disaster preparedness.³³ Similarly subnational governments invest in disaster preparedness through the county budgets. In the 2016/17 county budget, Migori County estimates to spend KES 128 million (US\$1.28 million) on environment and disaster management.³⁴

Donor funding to disaster preparedness

Donor funding for disaster prevention and preparedness is a small proportion of humanitarian assistance to Kenya – rising from 0.5% to 8.1% of the total over a period of 5 years (2009 to 2014; Figure 6). Although the share is small, preparedness has increased much faster than humanitarian assistance has in Kenya. In 2014, humanitarian assistance to Kenya decreased by 13.2% but the component for disaster preparedness and prevention increased by 37.3%.

Figure 6: Aid to disaster preparedness and prevention to Kenya in 2014 was more than five times what it was in 2009



Source: OECD CRS data

Multilateral institutions contributed the majority (63.5%) of this aid to Kenya. The proportion delivered by Organisation for Economic Cooperation and Development (OECD) Development Assistance Committee (DAC) countries as bilateral aid has decreased from 71.8% in 2009 to 36.5% in 2014.

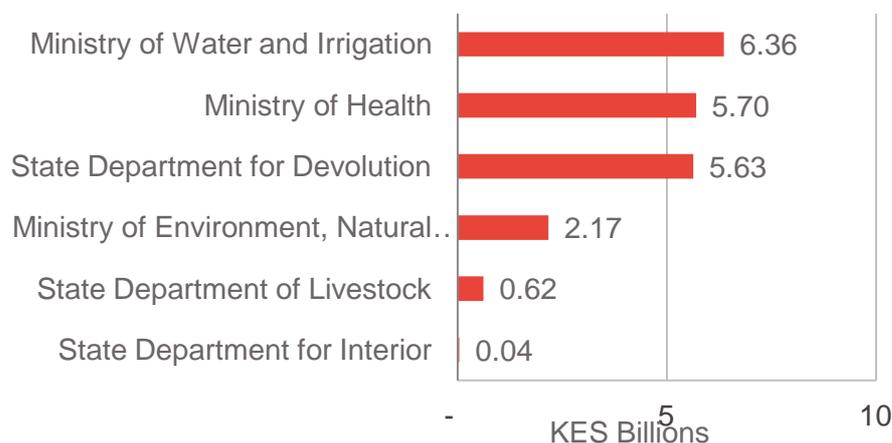
In 2014, European Union (EU) institutions contributed the majority (56.1%) of multilateral aid, amounting to US\$15.1 million (KES 1.51 billion) – largely towards drought preparedness.³⁵ The United States (US) gave the second largest amount (14.4%) followed by Sweden (13.6%).

Domestic budget allocations to disaster preparedness

Kenya’s government provides funds for disaster preparedness and prevention, mainly through ministries, state departments and county governments. In the 2016/17 budget, disaster-related projects formed closed to 2.5% – KES 20.5 billion (US\$205 million) of the total budget. This is projected to increase to 2.6% in 2017/18.

As shown in Figure 7, allocations to the three natural disasters (droughts, floods and disease outbreaks) are traceable in the respective ministries. Disease control is funded through the Ministry of Health and Ministry of Agriculture, Livestock and Fisheries (State Department of Livestock); droughts through the Ministry of Devolution and Planning (State Department for Devolution),³⁶ floods control through the Ministry of Water and Irrigation; other disaster prevention and control programmes through the Ministry of Environment and Natural Resources, Regional Development Authorities and the Ministry of Interior and Coordination of National Government (State Department for Interior).

Figure 7: In 2016/17 funding for disaster preparedness was mainly allocated to Ministries of Water and Irrigation, Health, and Devolution and Planning (State Department for Devolution).



Source: Kenya national budget 2016/17

Government contingency fund for disasters

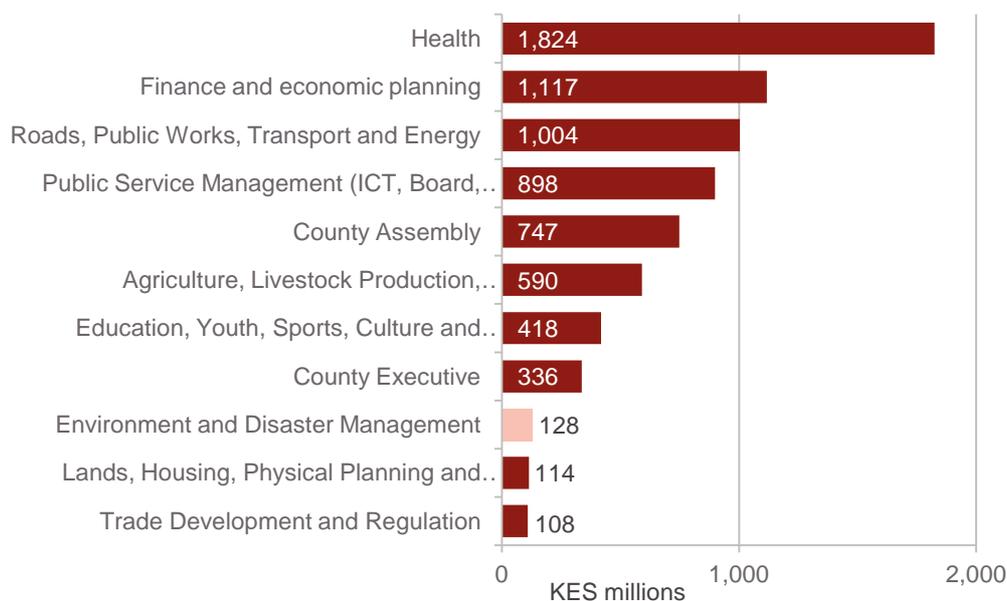
The government has established a disaster contingency fund guided by the Contingencies Funds and County Emergency Funds Act.³⁷ The country is required to make an annual allocation of up to 2% of the total budget for disaster response. We

understand this fund is located at the Ministry of Finance, but were not able to obtain further information. The draft DRM law has also proposed a DRM fund, which will be no less than 2% of the country's annual revenue. NDMA also has a drought contingency fund for drought response. The EU (linked to the aid from the EU) has largely funded this.

Subnational budget allocations to disaster preparedness in Kenya – the case of Migori County³⁸

In Migori County, disaster management falls under the Ministry of Environment, Department of Environment, Natural Resources and Disaster Management. For 2016/17, the Ministry received 1.8% (KES 128 million) of the total budget. The health sector received the highest budget allocation (Figure 8).

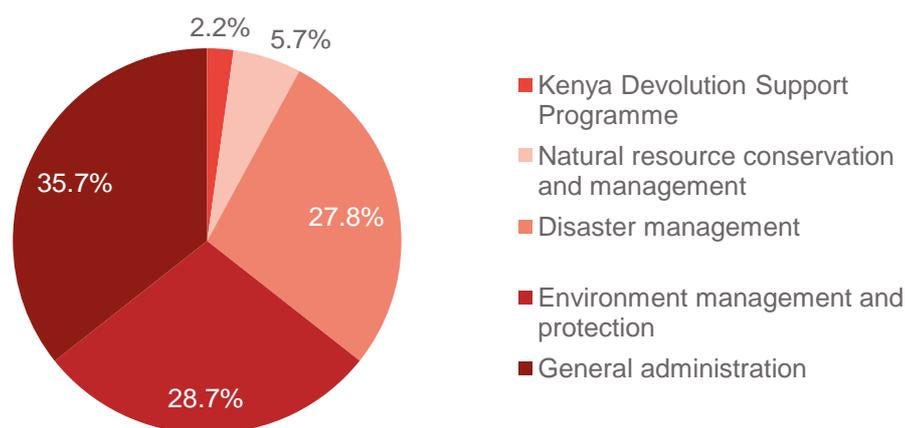
Figure 8: Migori County 2016/17 budget estimated a 1.8% spending on environment and disaster management



Source: Migori County 2016 budget

At the programme level, 36% of the Ministry of Environment's allocation goes to general administration and 29% goes to environment management protection, while all the funds allocated to disaster management under this ministry are for purchase of firefighting vehicles and equipment.

Figure 9: General administration accounts for most of the Ministry of Environment and Disaster Management's budget



Source: Migori County 2016 budget

Like at national level, there are some DRR functions within the Ministry of Health and Ministry of Agriculture, Livestock & Fisheries and Water Development in Migori County. Livestock disease control and management was budgeted for KES 11.6 million (2.0% of the Ministry of Agriculture, Livestock, Fisheries and Water Development budget), compared to KES 2.2 million for human disease surveillance/emergency preparedness and response (a paltry 0.12% of the Ministry of Health budget. Of this, 54.5% is for field allowances and the rest is for laboratory supplies and purchase of small equipment in 2016.

Overall in 2016, disaster-related activities formed 1.9% (KES 141.4 million) of the overall budget for Migori County, compared with 2.5% of Kenya's national budget. This indicates that overall spending on disaster-related activities at subnational level is lower than at national level. Hence, county governments will need a lot of support from national governments in the case of emergencies.

ARC premium contribution

ARC is an insurance facility that enables early action in drought preparedness and building country resilience. Kenya has been a member of the ARC since 2012 and made the first premium contribution in 2014. We understand that Kenya has been making annual premium contributions estimated at US\$9 million (around KES 800 million in 2014)³⁹ – we could not trace this contribution in the national budget. So far, the country has not received any payouts. When it does, a higher proportion will be spent on cash transfers (75%) while a quarter (25%) will be spent on water provision. This is outlined in the country's ARC Operational Plan.⁴⁰

Financial resources section conclusion

While Kenya has received international financial assistance in response to emergencies, funding for disaster preparedness activities has historically been comparatively low – though this is now on a positive trajectory, albeit at 8% of total humanitarian ODA.

The ARC is an example of a regional pooled funding mechanism that aims to improve current responses to drought emergencies and to build capacity within member states to manage these risks. Kenya's initiative to sign up to the ARC is to be applauded – the US\$9 million (around KES 800 million in 2014) premium is nearly 5% of the domestic expenditure on DRM and preparedness.

It is recognised that national governments have primary ownership of managing risk within their own countries and financing-related activities. Yet tracking disaster preparedness expenditure in domestic budgets is challenging, with DRR activities commonly spread across multiple budgets. Where data is available there is great variability in the reporting of budgets and spending at national and subnational level; for this reason our domestic analysis focuses on only one year.

Section 3

Preparedness at the subnational level – case studies

This section outlines the findings from the fieldwork carried out in Mandera and Migori Counties. Our stakeholders ranged from county officials to local organisations, international organisations and members of the community. The El Niño 2015 was a reference point for the respondents; this enabled them recall how preparedness and response was carried out.

Mandera County

Located at the north-eastern tip of Kenya, Mandera borders Somalia and Ethiopia. The county reports the second highest poverty incidence in the country (85.8% of people below the poverty line). It is prone to drought, flash floods, cross-border conflicts and disease outbreaks such as dengue fever, cholera, chikungunya and Rift Valley fever.

Stakeholders and how they interact on disaster preparedness

During 2016, international NGOs and UN agencies have scaled down their operations in Mandera because of the security situation and dwindling resources. The current stakeholders for disaster preparedness are from government and the non-government agencies. These include NDMA, which is responsible for coordination of drought preparedness, the county government, the County Commissioner, Agency for Technical Cooperation and Development (ACTED), Norwegian Refugee Council, Islamic Relief, and local organisations such as RACIDA, the Rural Agency for Community Development and Assistance.

While most UN agencies have no presence, some like the United Nations Children's Fund (UNICEF) and the World Food Programme have retained liaison offices by partnering with INGOs like ACTED.

There are two committees that contribute to preparedness planning in the county – the County Steering Group and the DRR Committee. The County Steering Group⁴¹ has representation from national government, county government sectors such as health, water, livestock, veterinary and agriculture, and non-state actors. It leads in development planning and disaster preparedness. It is co-chaired by the County Commissioner and County Governor and NDMA is the secretariat.

The DRR Committee brings together implementing agencies and members of the communities through the community-managed disaster risk reduction (CMDRR) approach. The information from the DRR Committee feeds into the County Steering Group and vice versa.

NGOs also have their own forum led by the Norwegian Refugee Council. It is made up of all active humanitarian actors implementing projects in Mandera County. Through this forum, NGOs share information and coordinate response activities and common concerns.

Evidence informing preparedness: data and needs assessment

Early warning information is provided by FEWS NET, the Kenya Meteorological Department and the NDMA. With this information the county is able to prepare contingency plans.

NDMA plays a major role by providing the platform for long-term planning on disaster management and contingency planning – this is appreciated by the actors in Mandera. While NDMA's focus is on matters relating to drought management, the manner in which disaster preparedness has been organised in Mandera county encompasses the other natural disasters: disease outbreaks and floods.

The county prepares monthly Drought Bulletins. Information for the bulletins is collected by local drought monitors who collect drought information on a continuous basis.⁴² A system of information dissemination is being piloted where the DRR Committee, with support from NDMA drought monitors, hoist flags of different colours indicating the different status of food security and thus drought. The flag is hoisted by the chairman or secretary of the DRR Committee to alert the community. This process is called *hareri* or *Gadudia* in the local language. So far, only 10 communities use this flag system.

In addition, there are a number of subject-specific coordination forums such as the County Peace Committee, Food Security Cluster and Security Committee. Through these platforms, stakeholders at county level are able to share, coordinate and make decisions on joint strategies and interventions.

Who responds to disasters and who are they accountable to?

Disaster response takes a multi-stakeholder approach. The organisations⁴³ who are part of the County Steering Group and DRR committees are the main respondents, alongside the communities.

At the sub-county level, CMDRR guides community preparedness, planning and response. It is made up of political and religious leaders and has a gender representation requirement for 30% of participants to be women. Whenever action is needed, implementing agencies (NGOs) are requested to take action through the DRR Committee backed by the County Steering Group. Stakeholders have empowered CMDRR by supporting it to prioritise risks and make contingency plans. The agencies have used

these plans to support the communities to address their risks. Communities are also trained on livelihood initiatives such as hay production and storage to build resilience.

We did not measure the effectiveness of the various multiple forums, but at present they seem to work well for the stakeholders. However, respondents felt that the county government should strengthen its knowledge of disaster and resilience measurement, climate change dynamics, modelling, disaster response triggers and thresholds.

The county government should also strengthen its role by increasing budget allocations to contingency plans and response operations, which should be disbursed in a timely fashion. At the moment, NGOs have limited funding to respond. NDMA is also facing inadequate funding.

A culture of preparedness

The need to prepare for future disasters such as flash floods or disease outbreaks has not changed among the county stakeholders following the recent 'non-events'. Because Mandera is prone to disasters, it has established a culture of preparedness both at the institutional level through contingency planning and at the community level.

Religion and traditional practices also play a major part in the communities' perceptions of non-events. On the positive side, there is the general belief that everything happens only with God's permission. As such, better preparedness is achieved with incorporation of local knowledge and practices. On the negative side, religion can play a role in 'non-preparedness'. Since people believe their fate is in the hands of a higher power, they believe that whatever they do might not have an effect on the outcome of God's will.

In addition, the stakeholders realised the need to have a policy and strategy for flood and other disasters beyond droughts. Currently, there is an initiative by ACTED to develop the county's DRM Bill. There is also realisation of the need for more awareness to lobby the county and national government to allocate an adequate budget for disaster preparedness and ensure early disbursement.

Policy guidelines for disaster preparedness

Two strategies guide the County's disaster operations: the Mandera Contingency Plan 2014/2015 and the (first) County Integrated Development Plan 2013–2017. However, there is no specific budget attached to disaster preparedness. It is therefore not clear how these strategies relate to national and international policy frameworks on disaster management.

Overall lessons for disaster preparedness in Mandera County

1. One of the key lessons from Mandera is that different actors have different strengths when it comes to disaster preparedness, mitigation and response. Initiatives that bring together these actors are recommended.

2. The County's line ministries lack adequate resources to respond to disasters and have to rely largely on civil society organisations, especially for the devolved functions. Most of the county allocations have been factored into infrastructure. Other support through skills building remains crucial for key ministries such as the Ministries of Health and Livestock.
3. Communities are better off with disaster preparedness activities that they can learn quickly and on their own. Simple and easy to replicate technologies such as hay production and bulking are worth promoting. These are technologies that have immediate impact on livelihoods and food security in general.
4. It was observed that disaster preparedness and response ought to focus on different levels for impact: at community level, where activities of DRR committees would be supported; at line ministry level, where heavy infrastructure requirements could be addressed; and at policy level. At each of these levels, different actors are more effective. The support ought to be long term but with immediate, medium-term and long-term considerations.

Political economy on decision-making and resource allocation

In Mandera, like elsewhere in the country, it is the incentives, interests, institutions and power relations that determine stakeholders' uptake of disaster preparedness and risk reduction policies and programmes. Disincentives towards provision of public goods, rent seeking, corruption, control of land use, role of powerful interest groups and uncompleted reforms also serve to undermine DRR policies and programmes.

We established that most development organisations in Mandera allocate resources on a no-regrets basis. This is in the form of pre-positioning, market assessments, and early warning system and resilience building of target beneficiaries. Resource mobilisation and investments for the organisations are influenced by community priorities and donors' thematic interests.

Resource allocation by the county government, on the other hand, is motivated by personal or political benefits. For example, during the El Niño 2015 preparation and response, despite having budget allocation for drought mitigation interventions, actual spending by the county government was far less than budgeted and the money was released late. There is also the issue of devolving funds to sub-county level, which has not happened. The relationship between county and national government resources allocation for disaster has become problematic.

Table 1: Barriers and enablers for disaster preparedness in Mandera County, focusing on the 2015 El Niño

Barriers	Enablers
Many stakeholders expressed their concern over county government priorities setting	Establishment of an early warning system by NDMA played a significant role in enabling successful preparation and early response
Kenya Meteorological information needs to be joined up with local knowledge to enable preparedness and early response	Existence of Mandera Disaster Contingency Plans helped stakeholders refocus preparation on those priority areas that had been identified
Lack of plans for post-event evaluation: this would assist in learning from disasters and translating the lessons learned into valuable future preparedness approaches	Strong grass-roots institutions in the form CMDRR and pastoral field schools. These institutions played an important role in prioritising disaster risk and response mechanisms and mobilising the community

Migori County

Lying at the Kenya-Tanzania border, Migori County experiences relatively fewer disasters than Mandera County does. Floods are more prominent and largely concentrated in one location (*Nyatike*) on the lower sides of River Kuja as it flows into Lake Victoria. Clan conflicts have been prominent in recent years, but are reducing.

Stakeholders and how they interact

NDMA does not have operations in the county. Under the County's Ministry of Environment, the Directorate of Disaster Preparedness is the government structure responsible for preparedness and response. Other ministries also spend on mechanisms that we would classify as disaster preparedness. For example, the Ministry of Water and Irrigation is constructing dykes along River Kuja to prevent flooding. Flood early warning systems have been installed by WARMA along the river to alert communities of the rising water level when floods are approaching. The Ministry of Health has a disease surveillance unit, though understaffed, to monitor possible outbreaks such as cholera. We did not hear about investments on animal disease outbreaks.

There are budget allocations in the county budget for these preparedness investments, but we did not come across a specific contingency plan outlining how the county responds, or SOPs.

On the other hand, there are the non-state actors mostly comprised of local NGOs, civil society organisations and INGOs like World Vision, ActionAid and the Kenya Red Cross. The Kenya Red Cross is respected and appreciated by the communities and county government as a first responder. It is also useful in conveying early warning information.

Implementing agencies in Migori tend to carry out livelihoods projects for the communities such as training on brick making and energy saving initiatives. A number of these agencies concentrate on HIV and AIDs⁴⁴ awareness, gender awareness and governance issues such as budget advocacy.

Except for the Kenya Red Cross, it appears that interactions between other implementing agencies and the county government on preparedness and response are minimal. We did not speak to the private sector in the county to understand what role it is playing on disaster preparedness.

Coordination of the county's preparedness does not seem to exist – organisations operate independently. The former District Disaster Committees, now called the DRR Committee, should be playing a role in coordinating preparedness; however, none of our respondents could recall any meetings of the committee. The Committee is to be chaired by the County Governor and the County Commissioner (who is a national government officer) but there seem to be power struggles affecting political will to coordinate.

'There are many agencies with relief supplies but it is not coordinated.' (Community Member, Migori County)

From the political angle, the County Assembly has the Environment Committee, which also addresses matters of disaster preparedness. Members of this committee expressed disappointment about the lack of a law on disaster preparedness, leading to limited accountability. There is limited collaboration among actors on preparedness.

'There was no [Members of the County Assembly] MCA representation during the El Niño 2015 preparedness that was led by the county government.' (Member of the County Assembly, Migori County)

Evidence informing preparedness: data, needs assessment

As mentioned, WARMA has installed flood early warning systems along the River Kuja. Community members use the systems to alert the wider population on the approaching floods and map hazard areas. With the Kenya Red Cross, the communities have identified locations for evacuation. Community drills are also used to alert communities on how to respond.

Communities rely on information from the Kenya Meteorological Department – though at times warnings turn out to be non-events. Hence they rely more on information communicated by NGOs, media and the police.

Who responds to disasters?

The Kenya Red Cross is recognised as a first responder. Sometimes the county government responds by distributing non-food items and food items. However, there is a general feeling that the response by government and politicians is often a facade to gain political mileage – this came up in many of our participants' responses though we cannot ascertain its accuracy.

A culture of preparedness

There is a marked difference across communities living in disaster prone areas and those living outside the prone areas. We found that in the former, communities are much more aware of disasters and therefore more prepared. Women, for example, have organised themselves into water resource users' self help groups to build their resilience. Through the groups the women desilt the river and sell the sand to earn a living. The women also pre-position items such as firewood as preparedness for the coming floods. Households in this community also own canoes, which help in evacuations.

Cultural barriers and high poverty levels can affect the community's preparedness. Households that have buried their loved ones in the homestead are less willing to relocate. It is regarded as a taboo to share a toilet facility with in-laws; people therefore tend to avoid rescue centres. The uncertainty of recovery and reconstruction from the disaster encourages communities to relocate as a last resort – which is often too late.

Communities in locations that are not disaster prone are much less aware of disasters, the need to prepare or the role they can play. They are well aware of other locations that are disaster prone; this creates an attitude that disaster is less likely to affect them.

Table 2: Barriers and enablers for disaster preparedness in Migori County, focusing on the 2015 El Niño

Barriers	Enablers
The fertile lands are most prone to disasters hence communities often relocate back to these locations after disasters occur	Organised community structures such as the council of Luo elders can be used to influence
Lack of or low level of awareness about disaster preparedness. In some communities there is no culture of preparedness: disasters bring 'relief' efforts, hence people are less willing to prepare	Community flood hazard maps: developed by Water Resource Users Association and community flood management organisations as early warning information system
Politicians not championing disaster preparedness: responding to disaster is good for their political careers	Disaster preparedness capacity of the community has been built by various organisations

Insufficient/no clear budget allocation and a weak relationship between the community and county government

Good working relationships with implementing agencies

High poverty levels in the community (causes: disasters, HIV and AIDS, illiteracy, culture, teenage pregnancies)

Section 4

Conclusion and recommendations

Governance and legal frameworks for disaster preparedness

Policies on disaster preparedness need to be in place

Policies in disaster preparedness define roles, priorities, fund allocation and enable accountability. We recommend:

1. A multi-stakeholder approach in the draft DRM law at national and county levels of government. This should involve representatives from human and animal health, academia, beneficiaries and the media.
2. Donors should invest in advocacy towards putting the laws in place. While some UN agencies like UNISDR are investing in this, more support will help fast track and strengthen the process.

Coordination of disaster preparedness can be strengthened

With the lack of guiding principles, coordination of preparedness across the different disasters is weak. There are multiple coordination platforms across the various actors that are perceived as useful but rely on good relationships to work.

Drought preparedness appears much better coordinated than flood and disease preparedness. It seems sensible for the country to consider replicating an NDMA-like approach for the different types of common disaster. These agencies should feed into a higher-level coordinating body that brings together all the disasters and coordinates response. Each of these NDMA-like agencies would have up to date SOPs, adopt a multi-stakeholder approach and establish systems at the national and subnational level. In essence, this model would actualise the DRR platform outlined in the Hyogo Framework and also link with NADIMA as proposed in the draft DRM law. This will help to avoid duplication of responsibilities or what could be seen as political competition for power. To get this moving, an initial recommendation would be that:

3. Humanitarian stakeholders should develop a timetabled strategy to build the political will among decision-makers and policy implementers to prioritise disaster preparedness.

SOPs should be standard and implemented

We found one recent SOP (see Box, Standard operating procedures) at the national level but could not ascertain its usefulness or uptake. We recommend:

4. The Government of Kenya, together with implementing agencies, should develop SOPs for the various types of natural disasters, which should be updated on a regular basis.
5. Besides enabling effective work and better coordination, sensitisation and awareness around these SOPs would contribute in promoting the culture of preparedness.

Capacity for disaster preparedness

Community participation in preparedness

We found different examples of community preparedness largely informed by subnational context. In Mandera, the CMDRR process enables beneficiaries to inform preparedness processes – the communities take part in drought preparedness by preparing specific and comprehensive community disaster preparedness and response plans and carry out DRR assessments. In Migori County, communities have organised themselves to build resilience through women self-help groups, community drills, community disaster champions, flood management committees, and community awareness meetings. We recommend that such initiatives be encouraged and their impact documented.

Gender inclusivity in disaster preparedness

The two focus counties demonstrate elements of gender inclusion in preparedness. In Mandera County, it is a requirement that CMDRR has 30% women representation. In Migori, women in flood prone areas have formed self-help groups to build their resilience. The fact that the current DRM law is championed under the Kenya Women Parliamentarians Association and led by Hon Tiya Galgalo is also an indication of the role that women can play in preparedness. In Migori County Assembly, disaster preparedness is championed by the Environment Committee chair Hon Susan Mohabe. We recommend:

6. Humanitarian actors explore ways of further strengthening women's participation in disaster preparedness at the policymaking level.

Data access and its interoperability

Access to data on disasters, risks and weather information does not seem to be limited in the country. The existence of various systems such as FEWS NET, INFORM and the weather prediction from the Department of Meteorological Services help to close the data gaps. We recommend:

7. Joining-up timely data from the national surveys with what NGOs and other non-state actors collect to make data more interoperable and up to date for use.

Linking Kenya's preparedness to international processes such as ARC and the Sendai Framework

Despite the lack of a law, we found links between Kenya's preparedness and international processes. Kenya has participated in both the Hyogo and Sendai Frameworks and was among the first countries to sign up to the ARC; it also makes the highest premium contribution in Africa to the latter. More of our respondents were aware of the Hyogo and Sendai frameworks, few were aware of the ARC. We recommend:

8. A specific strategy by government and the ARC to increase awareness of the ARC and its benefits to Kenya.
9. The ARC should consider including policies on other natural disasters, as it currently only covers drought.

Resource allocation to disaster preparedness

We found allocations to be increasing, particularly at the international level. However, we did not assess how the mix of other instruments of preparedness interacts. As a starting point, we recommend:

10. An assessment of how the different financial instruments funding preparedness interact and which instruments would have greater impact on preparedness planning. These instruments would need to be promoted as fit for purpose under a no-regrets approach.
11. At the subnational level, better government budget allocation and timely disbursement would ensure better preparedness and response. But this in turn would rely on stronger accountability mechanisms at subnational level and we recommend that good practices in this area are further understood and applied. This would also help substitute allocations from national government and non-state actors.
12. Setting indicators of budget allocations to disaster preparedness is equally important. This is acknowledged in other literature⁴⁵ and Kenya could set an example of defining this in the budget.

Subnational disaster preparedness support

We found that the subnational level preparedness process is less coordinated, particularly in counties with no NDMA presence (24 counties). The fact that disaster preparedness and response is a shared role between national and subnational government results in limited coordination. We recommend:

13. A preparedness model as used in Mandera County that takes a bottom-up approach should be encouraged in other counties even those outside the ASAL counties.
14. Roles of the national and county government in disaster preparedness should be clarified in the law and standardised across other counties.
15. County government officials should benefit from knowledge strengthening on: disaster and resilience measurement, climate change dynamics, modelling, disaster response triggers and thresholds.
16. The knowledge strengthening can include post-event debriefing meeting of stakeholders where lessons from past disasters like El Niño preparedness are analysed to improve future response.

Annex 1: Methodology

Financial resources for preparedness

Data sources: The key data sources were OECD DAC Creditor Reporting System (CRS), national budgets for Kenya, and the Migori County budget for 2016/17.

Domestic public resources

At subnational level, sectoral spending on environment and disaster management in Migori County budget.

At the national level, Kenya's budget presents spending for different ministries and government agencies. Several agencies have a component of disaster management in their budgets. We searched programmes of each department with keywords that relate to disaster to identify government departments that allocate to disaster preparedness or disaster risk reduction. These include disaster, floods, flooding, drought(s), risk, disease control, surveillance, prevention, famine and hazard.

Government departments with a disaster component include: State Department for Interior; under the Ministry of Interior and Coordination of National Government; State Department of Livestock at the Ministry of Agriculture, Livestock and Fisheries; Ministry of Environment and Natural Resources, Regional Development Authorities; State Department for Devolution under the Ministry of Devolution and Planning; Ministry of Health; and Ministry of Water and Irrigation.

Donor resources

Donor resources to the humanitarian sector were collected from the OECD DAC CRS. All figures on the donor financial flows are in constant 2014 prices and are gross disbursements. These aided the analysis of expenditure on disaster prevention and preparedness in the humanitarian sector. Further project-level resources were collected from OECD DAC CRS, under sector: VIII.3. DPP purpose code: 74010.

We searched for certain keywords within the project descriptions to classify the disaster ODA for Kenya into: droughts, floods, disease outbreaks and others. In total, 134 projects were identified and classified. This formed the analysis of this disaggregation at national level.

Key informant interviews and focus group discussions

We carried out 70 key informant interviews and 6 focus group discussions. Selection of respondents followed the stakeholder mapping prepared at the inception stage and

recommendations from other respondents. We classified stakeholders across the three natural disasters; floods, droughts and disease outbreaks, and stakeholder types such as government, INGOs, local NGOs, media, academia and UN agencies.

At the national level, we had key informant interviews and a focus group discussion with INGOs. At the subnational level, we combined key informant interviews with focus group discussions with local NGOs and with community members. We identified community members who were members of groups involved in disaster preparedness activities. This ensured that they were well aware of disaster preparedness. The focus group discussions were voice recorded and captured on flip charts and photographs taken. The data for this study were stored in our internal server, to which only members of the team had access. This ensured confidentiality of the respondents. In total, we spoke with 111 respondents of whom 46 were at the national level and 65 were at the subnational level. We also reviewed key documents outlined in the Notes section of this report.

Limitations of this study

We were not able to speak to all the respondents we had anticipated because they were not available in the time period. We interviewed private sector and academia representatives – but they are not a large proportion of the respondents.

Some respondents – particularly in government – requested to be anonymous; hence we have not made specific reference to what they said. We only attribute the type of institutions the quoted respondents represent e.g. government, legislature or international NGO unless where we sought permissions.

Some respondents could not recall vividly what happened in previous disasters; there is, therefore, a likely recall bias.

Security was a threat to the team in Mandera County. We had a local contact who gave us regular security alerts, which informed us on the best dates to travel to Mandera to conduct the study. This also limited the locations that we could reach; we concentrated on the locations around Mandera town.

We could not spend sufficient time understanding the various financial instruments for disaster preparedness and we have recommended that this type of analysis is important for future work.

Access to budget data was also a limitation, particularly at the subnational level – we could only access the latest budget for Migori County and could not access the Mandera budget. Budgets of previous financial years were not accessible. In addition, there is no specific methodology on disaster preparedness indicators in the budget; it was therefore difficult to trace budget spending in previous financial years. We acknowledge that presenting budget figures for one financial year limits comparison or drawing out patterns, but we hope it gives some indication of government spending towards disaster preparedness.

Endnotes

¹ UNISDR & UNOCHA, 2008. Disaster Preparedness for Effective Response Guidance and Indicator Package for Implementing Priority Five of the Hyogo Framework. Available at: http://www.unisdr.org/files/2909_Disasterpreparednessforeffectiveresponse.pdf , Page 3

² Ministry of Devolution and Planning, 2015. *National Policy for the Sustainable Development of Northern Kenya and other Arid Lands: Unlocking our full potential for realization of the Kenya Vision 2030*. Available at: <http://www.devolutionplanning.go.ke/wp-content/uploads/2015/04/DRAFT%20ASAL%20POLICY.pdf>, Page 1.

³ Kenya National Bureau of Statistics, Centre for Training and Integrated Research in ASAL Development and Centre for Environment and Development, Bern University, 2016. *Socio-Economic Atlas of Kenya*.

⁴ Kenya Red Cross, 2015. *Cholera Out Break In Migori, Homabay And Nairobi County: Update 1*. Available at: <http://www.redcross.or.ke/index.php/news-event/item/cholera-out-break-in-migori-homabay-and-nairobi-county-update-1>

⁵ UNICEF, 2015. *Kenya Humanitarian Situation Report*, Quarter 4, 2015. Available at: <http://reliefweb.int/report/kenya/kenya-humanitarian-situation-report-quarter-4-2015>

⁶ MIGORI News, June 09, 2014. Migori County government urged to invest more in disaster management. Available at: <http://www.migorinews.co.ke/news/county-news/migori-county-government-urged-to-invest-more-in-disaster-management/>, comment made by LandAid

⁷ Kenya National Bureau of Statistics, Centre for Training and Integrated Research in ASAL Development and Centre for Environment and Development, Bern University, 2016. *Socio-Economic Atlas of Kenya*.

⁸ The INFORM Risk Index and looks at three dimensions of risk: hazards and exposure; vulnerability; and lack of coping capacity. The INFORM model is split into different levels to provide a quick overview of the underlying factors leading to humanitarian risk. 10 indicates the highest level of risk.

⁹ UNISDR, 2010. *Building Back Better for Next Time: Experiences and lessons learnt from the project "Building resilience to tsunamis in the Indian Ocean"*. Available at: http://www.unisdr.org/files/14499_buildingbackbetterforthenexttime.pdf

¹⁰ UN, 2015. *The Sendai Framework for Disaster Risk Reduction 2015-2030*. Available at: <http://www.unisdr.org/we/coordinate/sendai-framework>

¹¹ Inspire Consortium, 2015. *Evidence Based Decision Making for Funding Allocations*. Available at: <http://reliefweb.int/report/world/evidence-based-decision-making-funding-allocations>

¹² According to the National Assembly proceedings 7 June 2001, the District Disaster Management Committees were established in 2001 with the task of preparing contingency plans in anticipation of disasters, keeping inventories of disaster response equipment, preparing and implement disaster awareness programmes, submission of disaster preparedness activities on a quarterly basis.

¹³ Ministry of Health, 2016. *Health Sector Working Group Report: Medium Term Expenditure Framework For The Period 2017-18 to 2019-20*. Available at: <http://www.treasury.go.ke/sector-reports-2018/send/127-2017/250-health-sector.html>, page 102.

¹⁴ <http://www.disastermanagement.go.ke/>

¹⁵ Ministry of Interior and Coordination of National Government & National Disaster Management Unit (NDMU), June 2014. *National Emergency Response Plan & Standard Operating Procedures (Sops)*. Available at: <http://www.disastermanagement.go.ke/downloads/>

¹⁶ Ministry of State for Special Programmes (MSSP) and Ministry of Provincial Administration and Internal Security - National Disaster Operation Centre (NDOC), 2009. *National Disaster Response Plan*. Available at: <http://www.ifrc.org/docs/idrl/857EN.pdf>, Chapter 3

¹⁷ Obtained from the KHPT Terms of Reference, shared by respondent.

¹⁸ From the SOPs, the Humanitarian Services Committee comprises principal secretaries and is chaired by the principal secretary, Ministry of Interior and Coordination of National Government. It shall 1) Initiate deployment of resources; 2) Source for the provision of non-emergency National resources and assistance; 3) Offer general policy direction on disaster emergency response activities.

¹⁹ The Constitution of Kenya 2010. Available at: <http://www.cickenya.org/>

²⁰ Republic Of Kenya, 2005. *Country's Position Paper on Risk Reduction*. Available at: <http://www.unisdr.org/2005/mdgs-drr/national-reports/kenya-report.pdf>

²¹ Introducing a draft bill as a private members' bill indicates no affiliation with a political party or to a respective ministry. These bills are drafted by the sponsoring MP who is often assisted by civil society and interest groups. In Kenya, introducing a law as a private members' bill is often associated with faster passing but could be limited at the implementation stage given it is not owned by government.

²² Hon Tiya is a first time MP but has worked in the humanitarian sector (emergency in education). Isiolo County falls in the ASAL region in Kenya. The Kenya Women Parliamentary Association) has a DRR caucus established in 2014 with 37 MPs. MPs feel that the law has not received enough advocacy to promote its enactment and that government '*does not seem to be in charge of disaster preparedness or response*'. In addition, the law does not seem to be a priority at the moment and particularly as the country goes into an election period (government respondents). Our non-government respondents feel that the draft bill is not being championed by many MPs; besides Hon Tiya, there is no champion at the cabinet level.

²³

<http://www.ifrc.org/Global/Publications/IDRL/Publications/Kenya%20IDRL%20Report%20Final.pdf>

<http://drr-law.org/resources/Kenya-Desk-Survey.pdf>

²⁴ While our respondents spoke very candidly about this, we were unable to ascertain the accuracy of their information. We choose not to name the specific donors that were mentioned.

²⁵ Members of the County Assembly are the policymakers at the county level.

²⁶ Republic of Kenya, 2014. *The Intergovernmental Relations (Amendment) Bill, 2014*.

Available at:

http://kenyalaw.org/kl/fileadmin/pdfdownloads/bills/2014/TheIntergovernmentalRelationsAmendment_Bill2014_SENATE.pdf

²⁷ Médecins Sans Frontières recalling how the country was ill-prepared for Ebola at the county level.

²⁸ Development Initiatives, 2014. Humanitarian evidence systems mapping in East Africa.

Available at: <http://devinit.org/wp-content/uploads/2016/01/Humanitarian-evidence-systems-mapping-Executive-Summary.pdf>

²⁹ UNDP, ActNow – Save later.

http://www.undp.org/content/undp/en/home/ourwork/get_involved/ActNow.html

³⁰ World Development Report, 2014. *Disaster Mitigation is cost effective*.

³¹ IFRC et al, 2014. *Early Warning Early Action: Mechanisms for rapid decision making*.

³² See note 10.

³³ Ministry of Finance, Kenya 2016/17 budget estimates

³⁴ Migori County, 2016/17 budget estimates

³⁵ The others multilaterals were UNDP, International Development Association, World Food Programme, World Health Organization and UNICEF.

³⁶ Mainly funding NDMA through the Hunger Safety Net Programme.

³⁷ <http://www.cickenya.org/index.php/legislation/acts/item/237-the-contingencies-fund-and-county-emergency-funds-act-2011#.V44yRKKZMUJ>

³⁸ We could not access the Mandera County budget to carry out similar analysis.

³⁹ Key informant interview with ARC focal person at NDMA.

⁴⁰ http://www.africanriskcapacity.org/wp-content/uploads/2016/11/OP_Pool1_Kenya-Operational-Plan.pdf

⁴¹ The County Steering Group prepared the first County Contingency Plan in 2014.

Available at:

<https://www.humanitarianresponse.info/fr/system/files/documents/files/Mandera%20CP.%20june%202014docx.pdf>

⁴² Mandera has a total of 20 field drought monitors who are stationed at ward level. They are responsible for observing local drought conditions and talking to the local community. The information they collect is based on specific livelihoods, environment and socioeconomic indicators. Information is collected on food security, water and so on in the form of food security assessments and impacts of drought. The information collected is collated and analysed to produce the monthly *Early Warning Drought Bulletin*.

⁴³ Together with NDMA, the main NGOs who respond include: Kenya Red Cross, Save the Children, ACTED, Norwegian Refugee Council, Rural Agency for Community Development and Assistance and Northern Kenya Education Environment Development Organization.

⁴⁴ The county's HIV prevalence rate ranks fourth in the country (14.7%, see

<http://blog.opendata.go.ke/hiv-situation-in-kenya/>)

⁴⁵ UNISDR, 2014. *Africa Status Report 2013*.

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